

Information to Inform an Appropriate Assessment: SAC Watercourses

Appendix 7 – Otter Information

Table A7.1 Otter Survey Results

Site No.	Watercourse ID	X coordinate	Y Coordinate	Access	Otter Presence
0	UD_01	240518	412322	Partial	No
1	Gorton Hall Drain	239812	411376	Yes	No
2	UD_02	239465	410914	Yes	No
3	Blackstone Burn	239252	410747	Yes	No
4	UD_03	238920	410338	No access	-
5	UD_04	238895	410292	No access	-
6	UD_04	238768	410106	Partial	No
7	UD_05	237639	408918	Yes	No
8	UD_06	237421	407999	Partial	No
9	UD_07	237381	406518	Partial	No
10	Burn Dennet	236997	404327	Yes	Yes
11	Ballydonaghy Drain	237078	403823	Partial	No
12	FD_04	236531	402429	Yes	No
13	Glenmornan River	236442	402331	Yes	Yes
14	UD_15	233537	391077	Partial	No
15	UD_19	234650	389867	Partial	No
16	River Derg	236058	387484	Yes	Yes
17	Derg 0.3	236329	387560	Yes	Yes
18	UD_20	237340	385896	No access	-
19	Scotts Mill Layde	238242	385396	No access	-
20	UD_21	238940	385098	No access	-
21	UD_22	239879	384715	Yes	No
22	UD_23	240896	383873	Yes	No





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Site No.	Watercourse ID	X coordinate	Y Coordinate	Access	Otter Presence
23	UD_24	241275	383339	Yes	No
24	UD_25	241363	383036	Yes	No
25	UD_26	241477	382793	No access	-
26	UD_28	241689	381979	Yes	No
27	UD_29	241667	381791	Yes	No
28	UD_30	241668	381630	Yes	No
29	UD_31	241649	381478	Yes	No
30	UD_32	241636	381256	Yes	No
31	UD_33	241740	380881	Yes	No
32	UD_34	241785	380691	Yes	No
33	UD_35	241837	380399	Yes	No
34	UD_36	241872	380267	Yes	Yes
35	UD_37	241550	378531	Partial	No
36	UD_39	241807	377996	Yes	No
37	UD_42	241815	377387	Partial	Yes
38	UD_43	241864	377081	Partial	No
39	Tully Drain	242597	375692	Yes	No
40	Fairywater	242786	374948	No access	-
41	UD_48	242552	374012	Yes	Possible
42	UD_49	242628	373688	No access	-
43	UD_50	242835	372426	No access	-
44	UD_52	243071	371960	Yes	No
45	UD_53	243146	371807	Partial	No
46	UD_54	243344	371521	Yes	Yes
47	Fireagh Lough Drain	243512	371284	Yes	No
48	UD_55	243730	371086	Yes	No





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Site No.	Watercourse ID	X coordinate	Y Coordinate	Access	Otter Presence
49	UD_56	244479	370513	Yes	No
50	Loughmuck	245084	369615	Partial	No
51	Drumragh River	245297	369442	Partial	Yes
52	Freughmore Drain	246057	369281	Partial	Yes
53	UD_57	246718	369085	Partial	No
54	UD_58	247174	369123	Yes	No
55	UD_108	247324	368974	Yes	No
56	UD_109	248168	367960	Partial	No
57	Ranelly Drain	248331	367700	Yes	No
58	Ranelly Drain	248589	367147	Partial	No
59	Ranelly Drain	248674	366568	Partial	No
60	Ranelly Drain	248717	366356	Partial	No
61	Ranelly Drain	248768	366170	Partial	No
62	Ranelly Drain	248867	366118	Partial	No
63	UD_60	249283	365494	Partial	No
64	UD_61	249862	364892	Partial	No
65	Letfern	250467	364031	Partial	No
66	UD_63	251210	363325	Partial	No
67	UD_65	251569	363033	Partial	No
68	UD_66	251652	362851	Partial	No
69	UD_67	252195	362129	Partial	No
70	Routing Burn	252386	361836	No access	-
71	UD_68	252620	361504	Partial	No
72	UD_69	252847	361179	Partial	No
73	UD_70	253022	360887	Partial	No
74	UD_70	253134	360597	No access	-



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Site No.	Watercourse ID	X coordinate	Y Coordinate	Access	Otter Presence
75	UD_71	253365	359956	Partial	No
76	UD_110	254305	358956	No access	-
77	UD_110	254846	358635	Partial	Yes
78	UD_111	255558	357922	Partial	Yes
79	UD_76	256325	357319	Partial	No
80	UD_77	256579	357265	Partial	Yes
81	UD_79	257225	357103	Yes	No
82	UD_80.3	257784	356994	Yes	No
83	UD_80	258802	356899	Partial	Yes
84	Roughan	259693	356576	Yes	Yes
85	UD_81	259997	356564	Partial	No
86	UD_81.2	261165	356316	Partial	No
87	UD_82	262067	356307	Yes	Yes
88	Ballygawley Water	262369	356492	Yes	Yes
89	UD_83	262251	356296	Yes	No



Information to Inform an Appropriate Assessment: SAC Watercourses

NIEA Agreed Otter Mitigation Procedure

Introduction

Two otter holts have been identified within the landtake of the proposed A5 WTC, with a further holt identified within close proximity of the works, in addition a number of couches or suspected couches have been identified within or in proximity to the landtake. Furthermore, a site with high potential for natal den presence has been recorded at Strabane Nature Reserve, this site could not be investigated fully due to density of vegetation, and thus a precautionary approach has been used in assessing potential impacts at this location.

This method statement has been created to avoid or reduce impacts of works at the specific locations where otter resting places are present and where suspected breeding is taking place. Further detail will be developed following pre-construction surveys and consultation with NIEA staff.

The confirmed otter holts within the landtake are at the Derg River (236185,387548) and along the Fairy Water (242717,374998). The confirmed holt close to the landtake is adjacent to Strabane Nature Reserve (233998,398502). The mitigation measures proposed are designed to safeguard otter during and following construction of the A5 WTC scheme, the measures intend to ensure that:

- Individual otter are not killed or injured during construction.
- No otter holt is damaged unnecessarily, and otters occupying holts are not harmed or disturbed.
- Where a holt must be removed for the construction works, adequate measures are taken to protect otters, and to replace the lost holt.
- Commuting and foraging otters within close vicinity of identified holts are not disturbed by construction works.

Pre-construction surveys Holts and couches

For the holts and couches a pre-construction survey will be undertaken at least 6 weeks prior to construction commencing within 100m of the site. The site will then be monitored on a weekly basis throughout the works. If otter are deemed to be present during the pre-construction survey, a licence will be required and detailed discussions with NIEA will be undertaken to determine the most appropriate course of action, including closure methods, and provision of replacement holts. The otter monitoring survey will use camera trapping to assess otter activity at each holt location. Camera traps will be set up and will then be visited on a monthly basis to collect data and maintain the camera traps. During these visits, the holts and immediate surrounding area will be surveyed for field signs of otter activity, such as otter spraints and footprints.

Strabane Nature Reserve potential natal site

For the potential natal site at Strabane Nature Reserve, a pre-construction monitoring survey for otter commenced in July/August 2016, more than 12 months prior to proposed construction work commencing. The otter monitoring survey is using camera trapping to assess otter activity at each holt



Information to Inform an Appropriate Assessment: SAC Watercourses

location. Camera traps were set up and are visited on a monthly basis to collect data and maintain the camera traps. During these visits, the holts and immediate surrounding area are surveyed for field signs of otter activity, such as otter spraints and footprints.

The data collected during the otter monitoring survey will be used to create update reports which will be issued to Northern Ireland Environment Agency (NIEA). Update reports will continue to be issued to NIEA once construction is underway.

Camera traps can look suspicious to members of the public. To prevent terrorism concerns arising from the public finding the camera traps, the local police have been informed of the camera trap study prior to camera traps being set up.

Protection Measures – During Construction Holts and couches

Prior to construction, a robust barrier will be erected to demarcate a 30m exclusion zone surround each otter holt or couch. This will exclude otters from the construction area and will protect otter holts and couches from damage by the works. This barrier can be in the form of a sturdy fence or an earth bund, but must be sufficient to restrict otters from entering the works area and restrict machinery from coming close to the otter holt or couch. This barrier will be maintained throughout the duration of the works.

Where a confirmed holt or couch cannot be avoided by the works a detailed method statement for closure of the resting place will be developed in consultation with NIEA, and a licence sought to permit the works. Mitigation measures in these cases will include provision of a replacement holt at the edge of the vesting line, or in a suitable location agreed with NIEA.

A toolbox talk will be provided to contractors prior to work commencing. The talk will be delivered by a suitably experience ecologist who will explain the legal protection afforded to otters, highlight sensitive areas within the construction area and discuss appropriate working methods to ensure otters are safeguarded.

An Ecological Clerk of Works will be appointed ahead of construction commencing. The Ecological Clerk of Works will undertake tasks including pre-construction site checks of areas close to otter holts and supervision of works. As a minimum requirement, the Ecological Clerk of Works will undertake weekly visits to the construction sites adjacent to otter holts and couches.

Works within 100m of otter holts and couches will be restricted to daylight hours to avoid the peak activity period for otter (which is after sunset and before sunrise). Artificial construction lighting will be avoided within this area. Trenches or excavations within 250m of the otter holt or couch will be covered at the end of every working day, or a ramp will be installed to ensure otters are not trapped within excavations. Removal of bankside vegetation within 30m of an otter holt or couch will be avoided unless unavoidable, in which case a licence will be sought from NIEA prior to such works commencing.

Construction works within close vicinity of rivers or drainage channels will be undertaken in accordance with best practice guidelines. This includes adherence to the methods and best practice described the



Information to Inform an Appropriate Assessment: SAC Watercourses

Pollution Prevention Guidelines (PPG)¹ cooperatively developed by NIEA, the Environment Agency for England and Wales and the Scottish Environment Protection Agency (SEPA) for Scotland.

Strabane Nature Reserve potential natal site

If the site be confirmed as a natal site by pre-construction survey, no works will be undertaken within 150m of the woodland edge prior to NIEA granting a licence.

As otter cubs can remain within the natal site for up to 10 weeks, daily monitoring of the camera trap at the outfall of the small watercourse to the main river will be undertaken until cubs are recorded leaving the site and not returning.

At this point, sensitive clearance of the woodland vegetation which falls within the works area will be undertaken, minimising removal as far as possible. These works will be overseen by an Ecological Clerk of Works, following a careful search of the site, using non-powered hand tools to remove minimal vegetation to facilitate access to the site.

Once the vegetation has been removed a 1.8m high (minimum) close board fence will be erected along the edge of the remaining woodland.

Protection Measures - Post Construction Holts and couches

When construction is complete the otter fence/earth bund should be carefully removed. The 50m area of bankside directly surrounding each otter holt or couch, including areas that may have been disturbed during the works, will be re-planted with appropriate vegetation. Hawthorn will be planted in the area immediately surrounding each holt/couch/replacement holt. This will provide additional protection for and help to prevent future disturbance.

A post-construction otter monitoring survey will be undertaken for 18 months following construction completion to assess if the works have affected otter activity. The monitoring survey will follow the same methods used in the preconstruction monitoring surveys and data collected will be used within update reports which will continue to be issued to NIEA every three months. A final report will be issued to NIEA following completion of the monitoring survey.

Otter-proof fencing is to be installed along the boundary of the newly constructed A5 WTC to reduce the risk of road casualties from otters that are not accustomed to the new road. A 150m stretch of fencing will be installed at the edge of the Dfl landownership, or in a location to be agreed with NIEA, on both sides of the road. Such fencing will tie in to an agreed otter crossing point.

Where the A5 WTC does not intersect the watercourse in the locations of the holts/couches, the fencing will be placed to rebound otters away from the road and prevent them from crossing it, and not act to direct them towards a specific crossing point. 58. 50mm wire mesh badger fencing will be used, as

http://www.netregs.org.uk/library_of_topics/pollution_prevention_guides.aspx



Information to Inform an Appropriate Assessment: SAC Watercourses

described in the DMRB (Volume 10, Section 1, Part 5, Chapter 9. This type of fencing will be robust enough to prevent the fence from being undermined by badgers and rabbits. The addition of a 300mm mesh overhang at the top, as described within DMRB is not seen as essential by Dr Paul Chanin, however it will be included if NIEA require it.

Strabane Nature Reserve potential natal site

Should evidence of otter breeding activity be confirmed by the preconstruction survey works, the close board fencing will be retained at this location, and maintained in perpetuity.

Landscape planting adjacent to the nature reserve will replace lost habitat over time, and serve to bolster the site's appeal to breeding otter.

Additional planting will be included around the adjacent SUDs pond to connect to the remaining portion of the Nature Reserve.

Landscape maintenance plans for this section of the landscape scheme will include notes on otter presence and measures maintenance contractors must take to prevent disturbance to otter at this location.